

PROCEEDINGS OF SPIE

Optics and Photonics for Information Processing VII

**Khan M. Iftakharuddin
Abdul A. S. Awwal
Andrés Márquez**
Editors

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Introduction

This year in San Diego, California, we held the seventh conference of Optics and Photonics for Information Processing. Like last year the conference attracted very interesting papers in a wide number of areas such as hybrid opto-electronic systems, pattern recognition, optical holographic systems, optical systems, 3-D displays, hyperspectral image processing, optical communications and sensors. This conference track preceded by an invited Signal and Image Processing track-wide plenary talk by Dr. Stephen Aylward of Kitware. He presented a lively hour long discussion on advantages, history, current status, and future direction of open source software in industry and academia. The conference of Optics and Photonics for Information Processing VII was formally opened by an enlightening invited presentation by Dr. Moreno from Universidad Miguel Hernández, Elche, Spain, who showed clever ways to produce and manipulate vortex and radially polarized beams and their enormous potential in optical free space communication. The conference had papers in optical systems, optical communication, and digital optical image processing. The papers presented in the conference contained good balance between theoretical, numerical and application oriented works. This conference also provides a training ground for graduate students, this year was no exception. We had a number of Masters and PhD student presentations. These presentations, as a whole, have shown to the audience the latest developments occurring in a wide range of the modern information processing areas.

We thank all who helped making this an exciting conference, especially the authors, audience and SPIE staff. Our special thanks go to the audience for their active participation by the way of asking engaging questions after most of the presentations. For next year, we look forward to seeing you in this conference, and hope that you will help us make the eighth edition an appealing place for discussion of the latest advances in the field.

**Khan M. Iftikharuddin
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